Public Access and Recreation
The proposed action would not significantly change existing outdoor recreation use on Fort Richardson, Fort Wainwright, and DTA. All proposed construction projects are within industrial portions of the cantonment area and are not used for recreational purposes. Increased training as a result of the proposed action may result in reduced public access to training lands for recreation. However, given the overall size and availability of USARAK lands open to the public, the proposed action would have a negligible effect. Impacts to public access and recreation from training would not exceed those described in the *Transformation of U.S. Army Alaska Final EIS* (USARAK 2004).

Subsistence
Section 810 of the Alaska National Interest Lands Conservation Act (ANILCA) requires federal agencies to evaluate the potential impact that proposed actions may have on customary rural subsistence practices. Fort Wainwright main post area and all of Fort Richardson are situated within regions designated as urban. For this reason, federal subsistence regulations do not provide a subsistence preference on Fort Richardson and Fort Wainwright main post area. All hunting, fishing and vegetation gathering on these installations are currently managed as recreational undertakings. For these reasons, any proposed activity on Fort Richardson or on Fort Wainwright main post would not adversely impact customary rural subsistence practices. Increased training activities on Donnelly Training Area and Fort Wainwright training lands (Tanana Flats and Yukon Training Areas) could reduce access to training areas for subsistence purposes. However, as described in the Public Access and Recreation section above, anticipated impacts are not expected to be substantially different from those described in the *Transformation of U.S. Army Alaska Final EIS* (USARAK 2004).

1.4 OTHER ENVIRONMENTAL ANALYSES RELEVANT TO THE ACTION

Previously prepared EAs and EISs that address ongoing actions, issues, or baseline data at USAGAK are used as background information or are incorporated by reference into this EA where appropriate. Examples of such NEPA documentation are:

- *Final Programmatic Environmental Impact Statement for Army Transformation*, March 2002
- *Final Environmental Impact Statement for Transformation of U.S. Army Alaska*, Vol. 1-2, U.S. Army Alaska, February 2004
- *Environmental Assessment for the Integrated Training Area Management Program Management Plan*, U.S. Army Garrison – Alaska, April 2005

2.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

This chapter describes the proposed action (convert the existing ATF to an Airborne BCT at Fort Richardson), an alternative to the proposed action, a discussion of alternatives eliminated from detailed consideration, and offers a summary of environmental consequences associated with the proposed action and alternatives.

USARAK proposes to reorganize the 1-501st ATF to an Airborne BCT. Additional Soldiers, facilities, and equipment would be required for this action. The increased stationing of Soldiers would be used to form additional companies/squadrons to further increase the unit's self-sufficiency and deployability. Additional facilities would be required to provide adequately sized and configured facilities to accommodate the Airborne BCT. Required facilities include: barracks, headquarters facilities, a vehicle maintenance facility, storage facility, classroom facility, dining facility, heavy drop rigging facility, and a sustainment and operations complex. Acquisition of equipment and increased training requirements

would also be necessary for this action. Training would occur on USAGAK lands and would involve joint operations with Elmendorf Air Force Base (AFB) for training missions and deployments.

2.1 DESCRIPTION OF THE ALTERNATIVES

2.1.1 Alternative 1: No Action

Under the No Action Alternative, the ATF would not convert to an Airborne BCT. Final development of the ATF would continue to allow the unit to meet its current military mission responsibilities. Mission-sustaining activities and construction upgrades would continue to occur. The ATF structure and training would also remain unchanged. No additional construction above that required to support the ATF would be needed under Alternative 1. Previously planned construction projects unrelated to the proposed action would continue at Fort Richardson.

2.1.2 Alternative 2: Convert 1-501st Airborne Task Force to Airborne BCT (Proposed Action)

Alternative 2 entails converting the existing 1-501st ATF currently situated at Fort Richardson to an Airborne BCT. Conversion would include additional stationing of personnel, facilities construction, training, systems acquisition, and deployment requirements as described below.

Stationing

Converting the existing 1-501st ATF would require additional stationing to create an Airborne BCT. The total personnel stationing requirement for the Airborne BCT would be 3,527 military persons, including the current 1,116 individuals that make up the ATF already stationed at Fort Richardson (Table 2.a).

Table 2.a Stationing Requirements for the Airborne BCT under the Proposed Action.

4th Brigade (Airborne), 25th Infantry Division (Light)	Personnel
Headquarters and Headquarters Company Infantry Brigade (Airborne BCT)	157
Headquarters and Headquarters Company 4/25 Brigade Troops Battalion	185
Engineer Company	76
Military Intelligence Company	77
Signal Company	60
Headquarters and Headquarters Company, 1-501st Infantry Battalion	210
Rifle Company (x3)	393
Weapons Company	79
Headquarters and Headquarters Company, 3-509 Infantry Battalion	213
Rifle Company (x3)	393
Weapons Company	79
HHT, 1-40 Cavalry (RSTA)	128
Motor Reconnaissance Troop (x2)	150
Dismounted Reconnaissance Troop	81
HHB, 2-377 Field Artillery Battalion (Strike)	104
Firing Battery (x2)	188
Headquarters and Headquarters Company, 167 Combat Support Battalion	166
Distribution Company	189
Maintenance Company	90
Medical Company	67

FSC, Infantry Battalion (x2)	254
FSC, Reconnaissance, Survey, and Target Acquisition	98
FSC, Strike	90
TOTAL	**3,527**

Construction

Support for the increased stationing would include construction of new facilities (Table 2.b). Construction of the additional facilities needed for the Airborne BCT would occur in phases and occupy approximately 60 acres of new facilities within Fort Richardson's cantonment area (Figure 2). Completion of all phases would be accomplished by 2012.

Table 2.b Facilities Requirements under the Proposed Action

Facility	Footprint (ft^2)	Brief Project Description
1 Consolidated Brigade Headquarters, Battalion Headquarters, and Classroom Facility	141,790	This consolidated facility would include a headquarters space for brigade commander and staff, headquarters space for each battalion, and a classroom facility to accommodate increased stationing.
4 Barracks	529,602	Provides four new 360-space barracks for unaccompanied, enlisted personnel.
7 Company Headquarters Facilities	300,392	One headquarters building per company. Seven buildings total would be constructed as a combination of four and five companies per building.
1 Unit Storage Facility	66,900	One consolidated unit storage facility to be constructed within same footprint as vehicle maintenance shop.
1 Vehicle Maintenance Shop	214,486	One consolidated brigade maintenance area in lieu of separate buildings per battalion.
Organization Vehicle Parking	1,279,152	Provides parking space for the vehicle maintenance shop.
1 Dining Facility	30,257	Provides increased capacity to accommodate uniformed military and unaccompanied personnel; would be located in the vicinity of the new Airborne BCT facilities.
1 Heavy Drop Rigging Facility / Parachute Repair Shop	42,175	A consolidated facility with sufficient space for simultaneous parachute packing, repair, washing/drying, supply bundle rigging, heavy equipment rigging, and storage.
Airborne Sustainment and Operations Complex	16,598	Includes five C-17 mock-ups, five C-130 mock-ups,34-foot jump tower, After-Action Review building, latrine, and confidence course.
Medical Clinic	48,400	Includes mental health, physical therapy, physical exam, preventative medicine, and optometry to provide healthcare to Active Duty Soldiers and Enrolled Active Duty family members.

Fort Richardson's Master Planning office is responsible for ensuring utilities and utility infrastructure is adequate to meet the installation's personnel and facility needs. According to Master Planning staff, some utilities infrastructure would need to be upgraded to accommodate new facilities and the increased personnel stationing under the proposed action.

The sewer system on Fort Richardson is aged and believed to currently be operating near full capacity. Modeling may be needed to investigate the severity of the problem. It is highly likely that portions of the sewer system will need to be replaced to accommodate new facilities and increased personnel. This utility system is a priority for Fort Richardson Master Planning staff.

Water supply is adequate to accommodate increased facilities and personnel. Water conveyance infrastructure is appropriate for increased usage in most areas. However, a section of water pipeline near D Street is older than others in the area and may need to be replaced in the near future. Existing storm drain capacity is adequate to accommodate increased facilities.

Fort Richardson electricity, provided by Anchorage Municipal Light and Power, is adequate to accommodate increased personnel and infrastructure. However, the distribution system on post is currently running above capacity and would need to be upgraded if additional facilities are tied into the system.

Equipment and Training

Training would increase under the proposed action and acquisition of additional equipment would be required. Equipment acquisitions would include Unmanned Arial Vehicles (UAV), high mobility multi-purpose wheeled vehicles (HMMWVs), and other ground vehicles. All types of equipment proposed for acquisition are currently utilized by USARAK.

Training would be conducted in conjunction with Air Force activities and would involve a high degree of coordination. Such coordination and cooperative training currently exists between the 1-501st ATF at Fort Richardson and units stationed at Elmendorf AFB. The Air Force is committed to stationing C-130 and C-17 aircraft at Elmendorf AFB to meet its global mission. These aircraft are available to support the overall USARAK mission and capable of accommodating the various Airborne BCT missions.

Airborne BCT training at the platoon level and below would take place at Fort Richardson. Training at company and above levels would take place at Fort Wainwright or DTA.

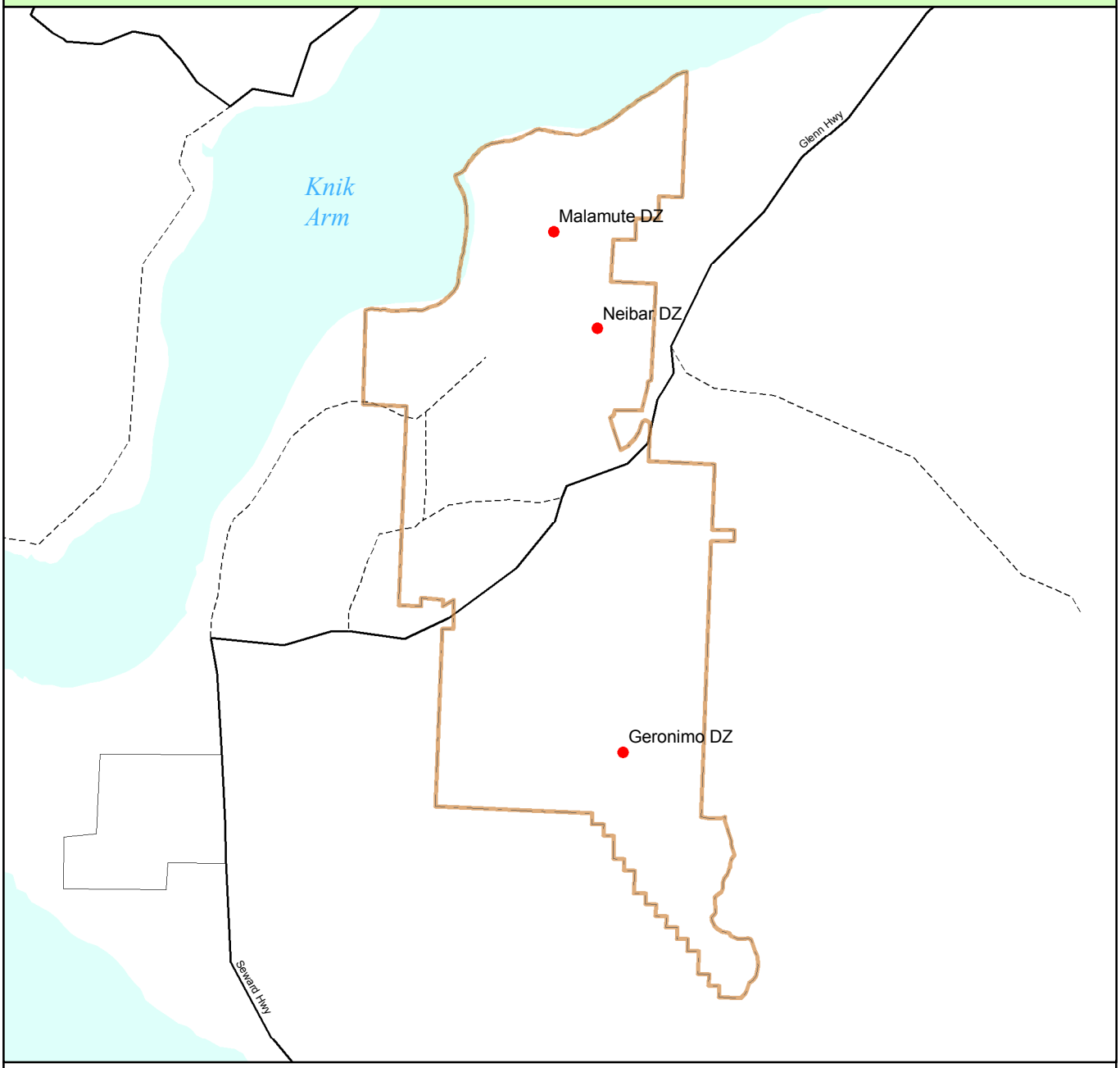
Vehicles would be expected to primarily remain on established roads, trails and landing zones. Impacts would not be expected to increase significantly above those described in the *Transformation of U.S. Army Alaska Final EIS* (USARAK 2004).

All ranges on Fort Richardson and larger ranges on DTA and the Yukon Training Area (YTA) would be utilized by the Airborne BCT. It is estimated that live fire would increase threefold above the current ATF utilization. Parachute drop operations could average as many as 60 Soldiers per day throughout the year to maintain proficiency. Aircraft utilized would include fixed wing (C-17, C-130) and rotary wing aircraft from other units. A typical large training exercise would consist of two missions a day for four days. Two to six brigade-sized training exercises would occur each year. These would likely occur at DTA. Large Air Package drops would consist of 1,200 Soldiers, 40 heavy packages, and containerized items. Areas large enough to accommodate Large Air Package drops include Malamute Drop Zone at Fort Richardson, Donnelly Drop Zone at DTA, and Ladd Field at Fort Wainwright.

Table 2.c lists examples of other ranges and drop zones that may be used by the Airborne BCT. Ranges and drop zones at Fort Richardson would be used most often, while those on Fort Wainwright would be expected to be used least often. Locations of drop zones and air fields that may be utilized by the Airborne BCT are depicted in Figures 3, 4, and 5.

Figure 3

Fort Richardson Drop Zones



Legend

Installation Boundary

Drop Zones

Roads

Highways

Light Duty

Trails

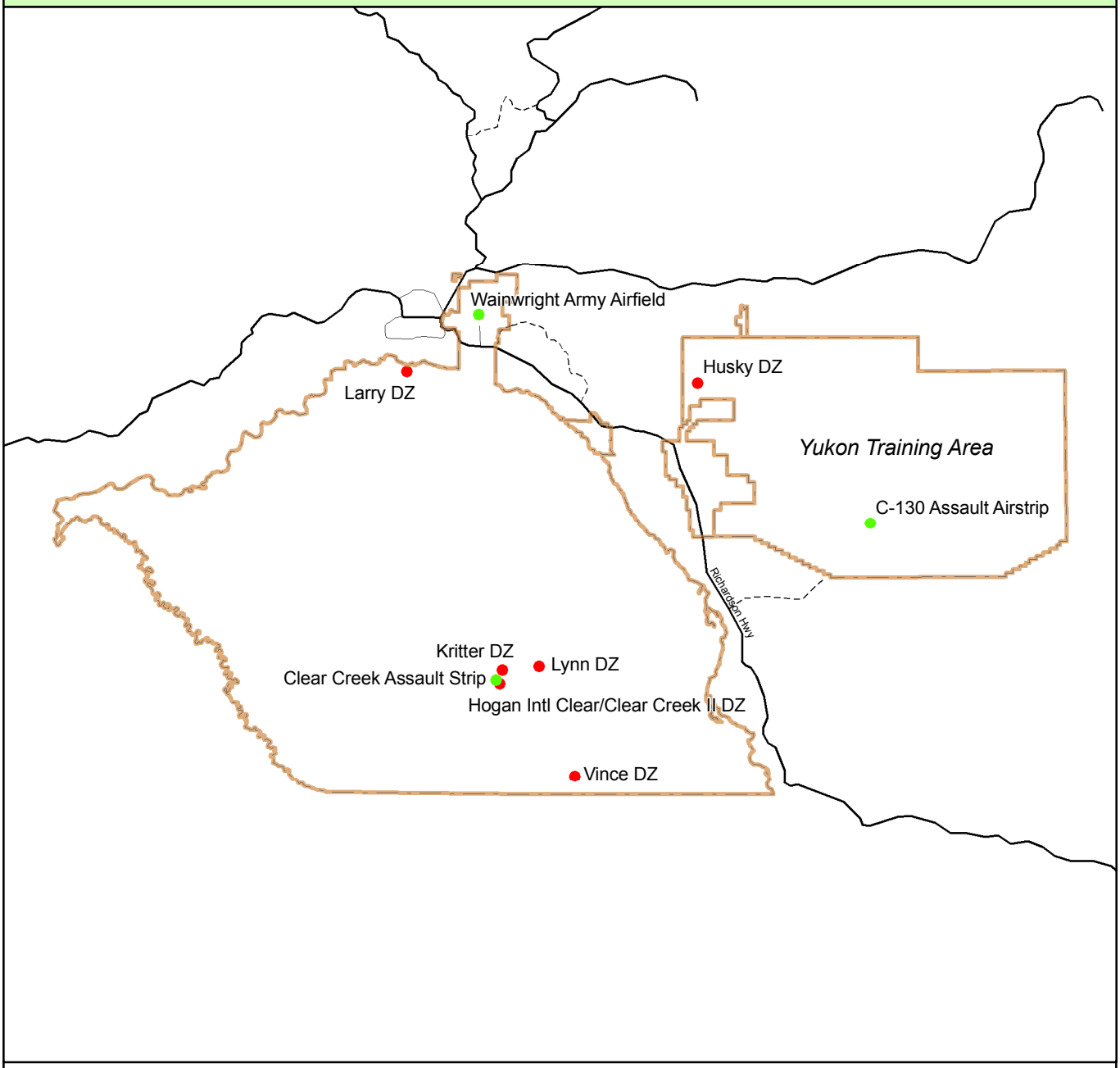
Scale: 1:225,000

2 1 0 2 Miles

N
W E
S

Figure 4

Fort Wainwright Drop Zones and Airfields



Legend

- *Installation Boundary*
- *Drop Zones*
- *Airfields*

Roads

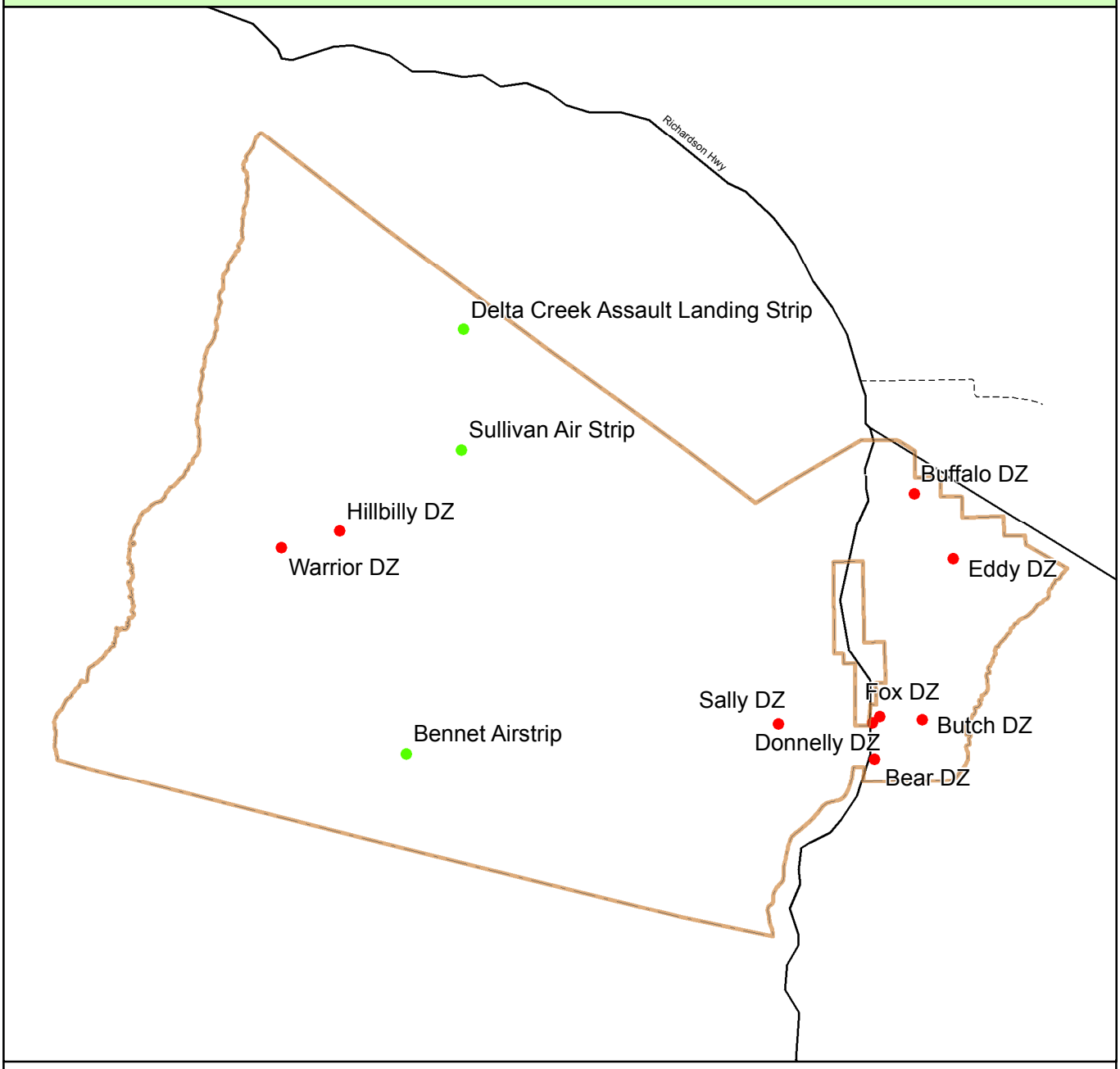
- *Highways*
- *Light Duty*
- *Trails*

Scale: 1:725,000

7 3.5 0 7 Miles

Figure 5

Donnelly Training Area Drop Zones and Airfields



Legend

Installation Boundary

Drop Zones

Airfields

Roads

Highways

Light Duty

Trails

Scale: 1:490,000

5 2.5 0 5 Miles

Table 2.c Example Ranges and Drop Zones Appropriate for Airborne BCT Training.

Fort Richardson	Fort Wainwright	Donnelly Training Area
Infantry Platoon Battle Course Infantry Squad Battle Course Small Arms Ranges Major Weapons System Ranges Malamute DZ	Combined Arms Collective Training Facility Small Arms Range Infantry Platoon Battle Course Infantry Squad Battle Course Digital Multi-purpose Training Range Urban Assault Course Ladd Army Airfield Husky DZ (YTA, winter only)	Collective Training Range Bondsteel Maneuver Range Texas Range Donnelly DZ Bear DZ Warrior DZ (West DTA) Buffalo DZ Allen Army Airfield (Fort Greeley)

In a typical field training exercise, Soldiers would parachute in and utilize nearby ranges and training areas by traveling on foot or using ground vehicles such as HMMWVs. For exercises occurring at DTA, ground equipment would either be delivered by vehicle convoy or travel by rail from Fort Richardson. After training, Soldiers would either return to Fort Richardson by aircraft or with the convoy by road or rail.

Maneuver impact miles (MIMs) of the Airborne BCT would increase by 200% compared to the ATF. A MIM is a measure of surface impacts that result from training. It is a conceptual unit of measure for military training representing the impact of training on training lands. A MIM is a scaling factor used to convert the effect of each vehicle's impact scaled to the impact equivalent of an M1A2 tank. One MIM has the equivalent impact on soil erosion as an M1A2 tank driving one mile in an armor battalion field training exercise.

Required maneuver training space would also increase by approximately 200% with the expansion to an Airborne BCT. The area is expressed in terms of square kilometer days (km^2 days). This is calculated by combining the area needed for each task, the number of units performing the task (unit density), the number of days the task requires, and the number of times each unit performs the task over the course of a year (iterations).

Table 2.d lists stationing, training, and vehicle requirements under each alternative.

Table 2.d Training Requirements for the Airborne BCT under the Proposed Action.[1]

Requirements	Alternative 1: No Action (ATF)	Alternative 2: Convert ATF to Airborne BCT
Stationing		
Personnel	1,116	3,527
Training		
Maneuver Space (km^2 days)	34,912	104,736
Maneuver Impact Miles[2]	8,200	24,600
Vehicles		
High Mobility Multipurpose Wheeled Vehicle (HMMWV)	62	619
Light Medium Tactical Vehicle (LMTV)	7	125
Medium Tactical Vehicle (MTV)	0	121
Heavy Expanded Mobility Tactical Truck (HEMTT)	0	34
Trailers	0	197
Small Unit Support Vehicle (SUSV)	39	100
Deployable Universal Combat Earth Mover (DEUCE)	0	2

Requirements	Alternative 1: No Action (ATF)	Alternative 2: Convert ATF to Airborne BCT
Ground Support Vehicles	7	4
Unmanned Aerial Vehicle (UAV) Raven	0	1
Commercial Construction Equipment (CCE)	0	2
Material Handling Equipment (MHE)	3	14

[1]With the exception of the Raven UAV, all vehicles are currently used by USARAK units in Alaska.

Deployments

In-State
Under current training doctrine, deployments for training within Alaska would not increase on a unit basis. However, the number of units, including platoon, company, and battalion, would increase under this alternative. Therefore, the total number of unit deployments and miles would increase. Convoys drive approximately 350 miles from Fort Richardson to Fort Wainwright or DTA.

Out-of-State
As the Airborne BCT is intended to have highly deployable and forced-entry capabilities, out-of-state and overseas deployments would increase in frequency and duration compared to the existing 1-501st ATF. Frequency, size, and duration of deployments for wartime activities depend on the geo-political arena and cannot be accurately predicated. However, the existing 1-501st ATF is expected to deploy in 2006.

Anchorage is the primary deployment point for all of USARAK. Since the Airborne BCT is expected to be highly deployable, future deployments for wartime activities are expected to be more frequent than existing units at Fort Richardson. Deployments would occur by air, land, or sea. Proximity to a port, rail line, and Air Force Base is thus extremely important for transport of both Soldiers and supporting equipment. Out-of-state deployments for all USARAK utilize the Port of Anchorage for sea deployment. All available landing strips, including Elmendorf AFB, would be used for deployment by air. Elmendorf is located adjacent to Fort Richardson and shares its eastern boundary with the installation. The infrastructure at Elmendorf AFB would be able to handle a simultaneous Stryker BCT and Airborne BCT deployment were if necessary. Fort Richardson's proximity to the point of primary deployment is advantageous for synchronized, efficient, and timely mobilizations.

2.2 DESCRIPTION OF ALTERNATIVES CONSIDERED AND ELIMINATED FROM DETAILED STUDY

NEPA requires that all reasonable alternatives for federal actions be analyzed. The Army examined all possible actions to build an effective and reasonable range of alternatives. Several additional alternatives were considered and eliminated because these alternatives failed to satisfy the purpose and need or meet the objectives for the proposed action (Section 1.2, Purpose and Need for Action), or were otherwise infeasible. These objectives are the standards that the proposed action and alternatives must meet to be considered reasonable.

The following alternatives will not be brought forward for further analysis in this EA.

Stationing an Airborne BCT at Fort Richardson with No New Infrastructure

This alternative proposes converting the 1-501st ATF to an Airborne BCT without new infrastructure. Sufficient space does not exist at Fort Richardson to accommodate an increase of approximately 2,411 Soldiers in terms of housing, company and battalion operating facilities, brigade headquarters, deployment facilities, medical facilities, dining facilities, or motor pool.

Current facilities at Fort Richardson would not be able to provide adequate, regulation-compliant facilities to house the increased Soldier population. Existing barracks would require major renovations to satisfy Army standards and upgrade electrical and mechanical systems. Renovations required to bring current housing structures to standard would worsen an already cramped barracks situation and would not be economical for such aged structures.

Fort Richardson currently has enough battalion operating facilities to accommodate the existing force structure, but not the Airborne BCT. Insufficient company and battalion operating facilities would mean many of the units would be doubled up in existing buildings. The current dining facility is sized to accommodate no more than the number of current Soldiers residing in barracks. The Airborne BCT would triple the unaccompanied personnel population and the current dining facility would be incapable of handling the increase. Further, the current facility would not be located within acceptable distance to the new Airborne BCT facilities. The current 1-501st vehicle maintenance shops are antiquated and cannot be economically modernized.

The sustainment training complex and heavy rigging facility are required to meet the training needs of early deployable units, such as the Airborne BCT which is to be deployable within 18 hours. Rapid deployment of the Airborne BCT would be delayed without these facilities. Without a new medical facility, there will be insufficient direct healthcare capacity to meet the increased stationing, and health service workload that exceeds capacity must be diverted to the local civilian health network. Limitations of, and impacts on, Anchorage's healthcare system do not make this a reasonable option.

Overall, the lack of new facilities would impact the performance of not just the Airborne BCT but of all other units that utilize Fort Richardson. It would also have potential impacts to the local civilian housing and medical sectors. A significant amount of new infrastructure is required to provide adequately sized and configured facilities to accommodate an Airborne BCT.

Stationing an Airborne BCT at Fort Wainwright

This alternative would entail moving the 1,116 military personnel of the 1-501st ATF, currently located at Fort Richardson, to Fort Wainwright. Stationing of approximately 2,270 additional personnel would then be required to complete the Airborne BCT. Construction of facilities identified in the proposed action would also be necessary. Additional construction would also be needed since, unlike Fort Richardson, Fort Wainwright does not currently have a drop zone rated for strategic air drop training, a jump tower, or a rigging facility. Due to these reasons and the increased distance from necessary port and rail deployment infrastructure in Anchorage, and the existing presence of the 1-501st ATF at Fort Richardson, this alternative was considered but eliminated from further study. Removing the existing ATF resources and personnel from Fort Richardson and building an Airborne BCT and supporting facilities from the ground up at Fort Wainwright does not present an advantageous alternative in terms of reduced environmental or socioeconomic impacts.

Stationing an Airborne BCT at Donnelly Training Area

This alternative would entail moving the 1,116 military personnel of the 1-501st ATF, currently located at Fort Richardson, to DTA. Stationing of approximately 2,270 additional personnel would then be required to complete the Airborne BCT. Construction of facilities identified in the proposed action would also be necessary. As of July 31, 2005, there were no USARAK Soldiers stationed at DTA. The limited number of personnel and facilities existing on Fort Greely are dedicated to support of the Space and Missile Defense Command mission and are not available for support of USAGAK activities. DTA does not have adequate USAGAK support personnel or facilities infrastructure to accommodate an Airborne BCT. Due to these reasons and the increased distance from necessary port and rail deployment infrastructure in Anchorage, and the existing presence of the 1-501st ATF at Fort Richardson, this alternative was

considered but eliminated from further study. Removing the existing ATF resources and personnel from Fort Richardson and building an Airborne BCT and supporting facilities from the ground up at DTA does not present an advantageous alternative in terms of reduced environmental or socioeconomic impacts.

2.3 CURRENT AND FUTURE ACTIONS CONTRIBUTING TO CUMULATIVE IMPACTS

Analysis of cumulative impacts is required for NEPA documents. Cumulative impacts result from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions. Cumulative effects can also result from individually minor but collectively significant actions taking place locally or regionally over a period of time. Impacts of these cumulative activities are discussed in Chapter 3 of this EA. Activities resulting in cumulative impacts include cantonment and range improvement projects, training activities, and nonmilitary activities. The regions of influence for cumulative impacts are similar to those described in Table 3.a.

Cantonment Projects
A variety of capital improvement projects are planned or are currently underway on installation cantonment areas. These areas typically contain installation support infrastructure. USARAK's cantonment areas have undergone substantial development over the past 50 years. Recent, current, and future projects include building upgrades, new training and support facilities, new barracks and housing, fencing, and other infrastructure (USARAK 2004, 2005; USAGAK 2004a,b,c; USAGAK 2005b). Many of these projects are described in the cumulative impacts section of the *Transformation of U.S. Army Alaska Final EIS* (USARAK 2004).

Range Improvement Projects
Maneuver training generally occurs outside of cantonment areas. There are several recent, current, and future range construction and improvement projects planned on USARAK lands. These include new ranges, forward operations bases, battle courses, demolition areas, and maneuver corridors (USARAK 2004, 2005; USAGAK 2005a).

NEPA analysis is underway for construction of a battle area complex and combined arms collective training range at Donnelly Training Area. Consideration of a range of alternatives for this project (including no action) is under way. Therefore site specific cumulative impacts from this project cannot be analyzed in this EA.

Training Activities
USARAK is currently undergoing force transformation to a Stryker Brigade Combat Team. This entails increased training activity, stationing of new personnel, and utilization of additional support vehicles and equipment. Environmental impacts of this action on USARAK training lands are presented in the *Transformation of U.S. Army Alaska Final EIS* (USARAK 2004). The ITAM program was specifically developed to provide sustained use of military training lands while also achieving long-term environmental sustainability. Many of the ITAM activities described in this EA were designed as mitigation for training impacts outlined in the aforementioned EIS.

Nonmilitary Activities
Nonmilitary activities can also contribute to cumulative impacts on USARAK lands. These include public recreation (including air-boating and off-road recreational vehicles) and other activities affecting USARAK lands such as the Trans-Alaska Pipeline (BLM 2002), Alaska Railroad activities (Alaska Railroad 2005), and the possible construction of a Knik Arm Bridge (Knik Arm Bridge and Toll Authority 2005). Alternatives are still being considered for the Knik Arm Bridge. Therefore it is not known if this project will have cumulative impacts to the proposed action of this EA.

2.4 SUMMARY OF ENVIRONMENTAL CONSEQUENCES

Table 2.e contains a summary matrix of the alternatives comparing their environmental consequences for the specific resource categories, with intended proposed mitigation actions factored into the assessment of impact. Chapter 3 contains a more detailed discussion of the environmental consequences of the proposed action and alternatives. The qualitative terms used in the matrix are generally defined as:

- None – No impact is expected to occur.
- Minor – Adverse impacts are expected to occur; impacts would be measurable and may have slight effects on resource.
- Moderate – Adverse impacts are expected to occur; impacts would be noticeable and would have a measurable effect on resource.
- Severe – Significant adverse impacts are expected to occur; impacts would be obvious and would have serious consequences to resource.
- Beneficial – Only beneficial impacts are expected to occur.

Table 2.e Summary of Environmental Consequences under Each Alternative.

Resource Categories	Alternatives	
	Alternative 1: No Action	**Alternative 2: Stationing of Airborne BCT**
Air Quality	Minor	Minor
Soil Resources	Moderate	Moderate
Water Resources	Minor	Minor
Vegetation	Minor	Minor
Wildlife and Fisheries	Minor	Minor
Socioeconomics Regional Economic Activity Housing, Public Services, Recreational Activities, etc	 Beneficial Minor	 Beneficial Minor
Noise	Minor	Minor to Moderate

3.0 DESCRIPTION OF THE AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter describes the affected environment (existing conditions) and the environmental consequences for the proposed action and alternatives. The table below describes thresholds to which environmental impacts are compared. Exceeding a threshold could represent a significant impact under NEPA.

Table 3.a Impact Thresholds[1] in Relation to Issue and Region of Influence.

Resource/Issue of Concern	Region of Influence	Thresholds for Possible Significant Impact[2]
Air Quality	Installation and Immediate Surrounding Area	If the proposed action would cause violation of National Ambient Air Quality Standards or require major modification of a Title V Operating Permit, negatively impact the ability of an area to meet CAA attainment standards, and/or cause violation of Nation Emission Standards for Hazardous Air Pollutants.